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REWRITABLE OPTICAL DISC (A) (DVD_RTR_DISC)/1001 INNER SIDE 1006 OUTER SIDE 1007 LEAD-IN VOL. & FILE DATA AREA LEAD-OUT AREA 1002 MANAGER 1004 AREA 1005. **(B)** (EMBOSSED/ INFO. 1003 (REWRITABLE (REWRITABLE REWRITABLE (REWRITABLE DATA ZONE) DATA ZONE) DATA ZONE) DATA ZONE) AUDIO & VIDEO COMPUTER COMPUTER (C) DATA AREA 1009 DATA AREA 1008 DATA AREA 1010 **ANCHOR** CONTROL THUMB-PICTURE POINTER VIDEO AUD10 NAIL INFO. FOR CONT-**OBJECTS OBJECTS OBJECTS OBJECTS** 1011 ROL INFO. 1012 1013 1014 (RTR. IFO) 1016 1015 AV DATA PLAYBACK RECORDING EDIT THUMBNA I L CONTROL CONTROL CONTROL CONTROL CONTROL INFO. 1101 INFO. 1021 INFO. 1024 INFO. 1022 INFO. 1023 (RTR_VMG) PGC CELL VIDE0 VIDE0 ALLOC-PLAYBACK CONTROL TITLE SET ATION OBJECT (F) INFO. 1108 INFO. 1103 MAP TABLE INFO. 1106 INFO. 1107 (PGCI) (CI)(RTR_VMGI) (AVFIT) 1105

FIG. 1

ROOT DIRECTORY 1450 SUB DIRECTORY 1451 REWRITABLE TITLE SET RW_VTS 1452 (DVD_RTR DIRECTORY) RTR=REAL TIME RECORDING DATA FILES 1453 CONTROL INFORMATION 1011 =RW_VIDEO_CONTROL. IFO (RTR. IFO) BACKUP OF CONTROL INFO. =RW VIDEO_CONTROL.BUP AV FILE 1401 (RTR DATA) =RW_OBJECT.OB VIDEO OBJECT (RTR_MOV. VRO) 1012 PICTURE OBJECT (RTR_STO. VRO) 1013 AUDIO OBJECT (RTR_STA.VRO) 1014 THUMBNAIL OBJECT 1016 REWRITABLE ADDITIONAL INFO. 1454 =RW_ADD.DAT SUB DIRECTORY 1451 VIDEO TITLE SET VIDEO_TS (OR VTS) 1455 AUDIO TITLE SET AUDIO_TS (OR ATS) 1456

SUB DIRECTORY FOR COMPUTER DATA STORAGE 1457

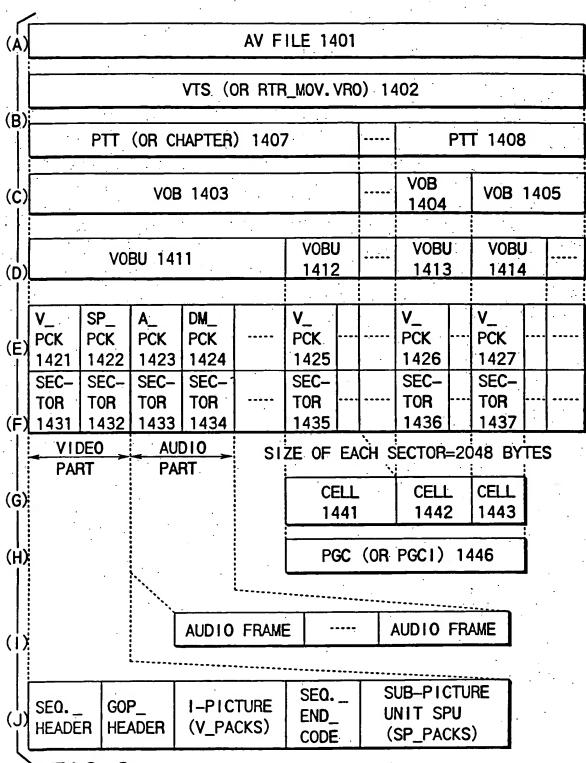


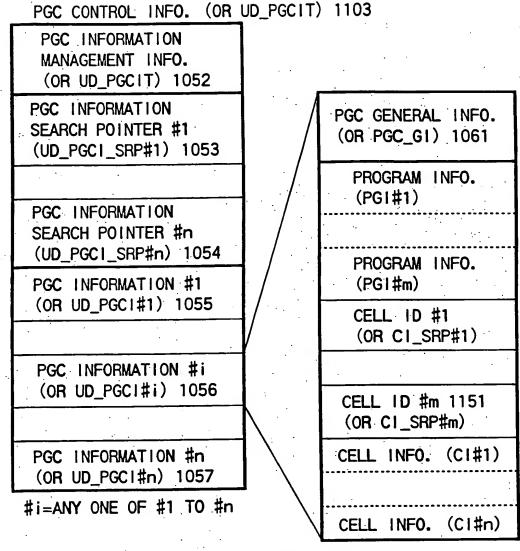
FIG. 3

	3	—	LSNg
	OB # (3)	EXTENT # £ 1475	
	>	ш .	LSNf+1
)ED	_	LSNf
	ECORI AREA 1460	EXTENT # \$ 1470	
	UNB	Ш	LSNe+1
	7	ь	LSNe
:	V0B #2 1462	EXTENT #β 1472	
. [>	Ш	LSNd+1
AV FILE 1401 VOB #1 VOB #3 (2) (2) 1461 1464 EXTENT EXTENT	ь	LSNd	
	XTEN #δ 1474		
	Ш	LSNc+1	
	·	LSNc	
	ENT 17		
	X # 4	LSNb+2	
	0		LSNb+1
			LSNb
	#3) 33.	ENT 7	
	VOB #3 (1) 1463	EXTENT # y 1473	LSNa+2
·			LSNa+1

LARGER LOGICAL SECTOR NUMBER (LSN)→ OUTER SIDE OF OPTICAL DISC 1001→ ←SMALLER LOGICAL SECTOR NUMBER (LSN) ←INNER SIDE OF OPTICAL DISC 1001

F16.4

•	•		
CONTENTS OF ALLOCATION	/	NUMBER OF EXTENTS IN UNRECORDED AREA 1601	1
MAP TABLE		1ST ADR. (LSN) OF 1ST EXTENT IN UNRECORDED AREA 1606	e-a
DISTRIBUTION INFORMATION OF POSITIONS OF		SIZE (SECTORS) OF 1ST EXTENT IN UNRECORDED AREA 1614	f–e
UNRECORDED AREA 1621		NUMBER OF EXTENTS IN VOB #1 1602	1
DISTRIBUTION		1ST ADR. (LSN) OF 1ST EXTENT IN VOB #1 1607	b–a
INFORMATION OF POSITIONS OF		SIZE (SECTORS) OF 1ST EXTENT IN VOB #1 1615	c-b
RECORDED DATA AS TO VOB #1 1622		NUMBER OF EXTENTS IN VOB #2 1603	1
DISTRIBUTION		1ST ADR. (LSN) OF 1ST EXTENT IN VOB #2 1608	d–a
INFORMATION OF POSITIONS OF		SIZE (SECTORS) OF 1ST EXTENT IN VOB #2 1616	e-d
RECORDED DATA AS TO VOB #2 1623		NUMBER OF EXTENTS IN VOB #3 1604	3
DISTRIBUTION INFORMATION OF		1ST ADR. (LSN) OF 1ST EXTENT IN VOB #3 1609	1
POSITIONS OF RECORDED DATA		SIZE (SECTORS) OF 1ST EXTENT IN VOB #3 1617	b-a
AS TO VOB #3 1624		1ST ADR. (LSN) OF 2ND EXTENT IN VOB #3 1610	c-a
		SIZE (SECTORS) OF 2ND EXTENT IN VOB #3 1618	d–c
		1ST ADR. (LSN) OF 3RD EXTENT IN VOB #3 1611	f-a
FIG.5	\	SIZE (SECTORS) OF 3RD EXTENT IN VOB #3 1619	gf



- *1> PGC INFORMATION (OR UD_PGC1) CAN DEFINE A GROUP OF ONE OR MORE PROGRAMS;
- *2> EACH PROGRAM CAN BE FORMED OF ONE OR MORE CELLS;
- *3> EACH CELL CAN BE SPECIFIED BY CELL ID (OR CI_SRP);
- *4> EACH CELL ID (OR CI_SRP) CAN INDICATE POSITION (OR START ADDRESS) OF CELL INFORMATION (OR CI);
- *5> EACH CELL INFORMATION (OR CI) CAN DETERMINE START TIME AND END TIME OF PRESENTATION OF CELL

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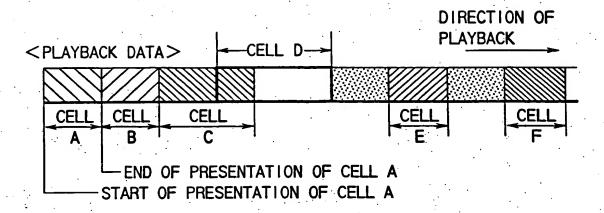


FIG. 7A

PGC INFORMATION (PGCI)

	PGC#1	1081	PGC#2	1082	PGC#3	1083
	NUMBE		NUMBE CELLS	ER OF S=3	NUMBE CELLS	ER OF S=5
I	#1	CELL A	#1	CELL D	#1	CELL E
I	#2	CELL B	#2	CELL E	#2	CELL A
	#3	CELL C	#3	CELL F	#3	CELL D
					#4	CELL B
I		· · · · · ·			#5 .	CELL E
	CELL	CELL INFO.	CELL ID	CELL INFO.	CELL ID	CELL INFO.
	CI_SRP #m=3	CI #n=3	CI_SRP #m=3	CI #n=3	C1_SRP #m = 5	CI #n=4

FIG.7B

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NUMBER OF VOB IN VTS OR PLAY LIST SEARCH POINTER TABLE INFO. (PL_SRPTI) 1756 1ST VOB ID IN VOB SEQ. OR 1ST PLAY LIST SEARCH POINTER (PL_SRP#1) 1757 PLAY LIST 2ND VOB_ID IN VOB SEQ. SEARCH POINTER OR 2ND PLAY LIST SEARCH TABLE POINTER (PL_SRP#2) 1758 (PL_SRPT) VIDEO nTH VOB_ID IN VOB SEQ. MANAGER INFO. OR nTH PLAY LIST SEARCH MANAGEMENT POINTER (PL_SRP#n) TABLE (VMGI_MAT) RTR VIDEO MANAGER VTSI 1106 INFO. (RTR_VMGI) (RTR_VMGI) <u>은</u> MOVIE AV FILE INFO. VTS GENERAL (RTR. TABLE (M_AVFIT) INFO. 1751 STILL PICTURE AV FILE RTR_VMG **VOB SEQUENCE** INFO. TABLE (S_AVFIT) INFO. 1752 ORIGINAL PGC INFO. PTT INFO. (ORG_PGCI) DATA 1753 USER DEFINED PGC VTS TIME MAP NAVIGATION NAVIGATION INFO. TABLE (UD_PGCIT) **TABLE 1754** TEXT DATA MANAGER $(TXTDT_MG)$ MANUFACTURER'S INFO. TABLE (MNFIT) FIG. 8

AV FILE 1401	TS (OR RTR_MOV.VRO) 1402	VOB#3 UNRECORDED 1763 AREA 1460	EXTENT# γ EXTENT# δ EXTENT# ζ 1473 1474 1475 1470	AV FILE 1401	VTS (OR RTR_MOV. VRO/RTR_STO. VRO/RTR_STA. VRO) 1402		VOB#D VOB#E VOB#F VOB#G VOB#H VOB#1 1774 1775 1776 1779 1779	PICTURE AUDIO THUMBNAIL OBJECTS OBJECTS 1013 1014 1016	RTR_STO. VRO
101	V. VR0) 14	V0B#3 1763	EXTENT# of 1474	1401). VRO/RTR	-#190A-S		A 0	
AV FILE	OR RTR_MO		(TENT# γ 1473	AV FILE	RO/RTR_STC			PICTURE 0BJECTS 1013	RTR_STO. VI
	VTS	V0B#2 1462	EXTENT# B E) 1472		RTR_MOV. VI	<u> </u>	VOB#C VC	AUDIO OBJECTS 1014	
4		V0 14			VTS. (0F	#180v_	V0B#B 1772	S	MOV. VRO-
		V0B#1 1461	EXTENT# \alpha 1471)∧¯₩—— <u>+</u>	VOB#A 1771	VIDEO 0BJECT 1012	RTR_M
F16.9A	F16.9B		F16.90	F16.9D	F16.9E			П П	5

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FIG. 10A	VOB FOR P	ICTURE OBJEC	FIG. 10A VOB FOR PICTURE OBJECTS (OR STILL PICTURE VOB GROUP RELATING TO S_VOGI#) 1631	JRE VOB GROUP RE	LATING TO S	V0G1#) 1631
FIG. 10B		·	VOBU (FOR ONE STILL PICTURE) 1641	ILL PICTURE) 164	=	
	V_PCK 1661	V_PCK 1662	V_PCK 1663	SP_PCK 1681	A_PCK 1691	A_PCK 1692
FIG. 100	I-PIC	I-PICTURE 1706	DUMMY DATA	SP_STREAM	A_STREAM	A_STREAM
			-VIDEO PART		AUDIO PART-	PART ——

FIG. 10D VOB FOR PIC	<u></u>	V08 F	요 -	CTURE	OBJEC	TS (0)	St	PICT.	일	B GROU	P REC	STING	T0 S_	#190/	1632	
F16.1	回	NOBU (S	10E VOBU (ONE STILL PICT.) 1642	CT.)	1642		V0BU 1643	43				NOB NOB	V0BU 1644	4	
FIG. 10F		V_PCK 1664		SP_PC	ਝ	A_PCK	SP_PCK A_PCK V_PCK 1682 1683 1665		A_PC	A_PCK V_PCK V_PCK 1667	¥ %		/_PCK		A_PCK 1695	

31#) 1633	VOBU 1647		I-PICTURE 1709	←-VIDEO PART-→		31#) 1634	VOBU 1650		AUDIO PART
G TO S_VO	NOB	V_PCK)Id-I	grv	• • • •	G TO S_VO	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	A_PCK	AUD
CTURE OBJECTS (OR STILL PICTURE VOB GROUP RELATING TO S_VOGI#) 1633	-	V_PCK 1673	DUMMY 1705			CTURE OBJECTS (OR STILL PICTURE VOB GROUP RELATING TO S_VOGI#) 1634		A_PCK 1701	
E VOB GROL	V0BU 1646	V_PCK 1672	I-PICTURE 1708	VIDEO PART		E VOB GROU	VOBU 1649	A_PCK A_	AUDIO PART—
LL PICTUR		K V_PCK 1671		+		LL PICTUR	J0A	A_PCK 1699	JNVVA
S (OR STI	JRE) 1645	SP_PCK 1683	N SP_ STREAM			S (OR STI	Æ) 1648	A_PCK 1698	
RE OBJECTS	E STILL PICTURE) 1645	V_PCK 1670	DUMMY 1704	-VIDEO PART-		RE OBJECT	STILL PICTURE) 1648	A_PCK 1697	-AUDIO PART-
	VOBU (ONE ST	V_PCK 1669	-PICTURE 1707	OIA	•			X A_PCK 1696	AUD-
)G VOB F	1 1	V_PCK 1668		<u> </u>)J VOB F	JK VOBU (ONE	SP_PCK 1684	1
FIG. 10G VOB FOR P.	FIG. 10H		F1G. 101			FIG. 10J VOB FOR P	FIG. 10K	FIG. 10L	

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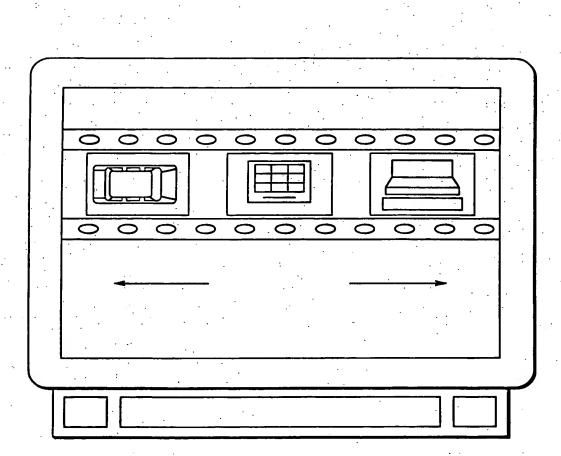


FIG. 11

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STILL PICTURE AV FILE (S_AVFIT)

STILL PICTURE AV FILE INFO. TABLE INFO. (S_AVFITI)

STILL PICT. VOB STREAM INFO. #1 (S_VOB_STI#1)

STILL PICT. VOB STREAM INFO. #n (S_VOB_STI#n)

STILL PICTURE AV FILE INFO. (S_AVFI)

STILL PICT. AD-DITIONAL AUDIO STREAM INFO. #1 (S_AA_STI#1)

STILL PICT. AD-DITIONAL AUDIO STREAM INFO. #m (S_AA_STI#m)

STILL PICTURE ADDITIONAL AUDIO FILE INFO. (S AAFI) VOB INFO. FOR
PICT. OBJECTS
MANAGEMENT
INFO. 1721
(OR S_AVFI_GI)
SEARCH POINTER
OF VOB INFO. FOR
PICT. OBJECTS
#1 1726 (OR
S_VOGI_SRP#1)
SEARCH POINTER
OF VOB INFO. FOR
PICT. OBJECTS
#i 1727 (OR
S_VOGI_SRP#i)

SEARCH POINTER
OF VOB INFO. FOR
PICT. OBJECTS
#k 1728 (OR
S_VOGI_SRP#k)

VOB INFO. FOR PICT. OBJECTS #1 1731

(OR S_VOGI#1)

VOB INFO. FOR PICT. OBJECTS #i 1732 (OR S_VOGI#i)

VOB INFO. FOR PICT. OBJECTS #k 1733 (OR S_VOGI#k)

FIG. 12 #i=ANY ONE OF #1 TO #k

VOB GENERAL INFORMATION FOR PICTURE OBJECTS 1736 (OR STILL PICTURE VOB GROUP GENERAL INFO. S_VOG_GI)

VOB ATTRIB.
INFORMATION
FOR PICTURE
OBJECTS
1737

VOBU MAP FOR PICTURE
OBJECTS
1738 (OR
STILL PICTIRE
VOB ENTRES
S_VOB_ENT#)

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VOB. STILL PICT. ATTRIB. ENTRY TYPE INFO. (S_VOB_ FOR ENT_TY) PICT. OBJ. NUMBER OF 1737 STILL PICT. (OR NUMBER VOBU OF VOBUs) MAP IN CORRES-FOR . PONDING PICT. VOB 1801 OBJ. (OR 1738 S_VOB_Ns) $(S_VOB_$ INFO. OF 1ST ent#) STILL PICT. IN CORRES-POND I NG VOB 1802 VOB. INFO. OF 2ND GENERAL STILL PICT. INFO. IN CORRES-1736 PONDING OR VOB 1803 S_VOG_ INFO. OF 3RD Gl STILL PICT. IN CORRES-

DATA SIZE OF STILL PICTURE
(OR VOBU) INDICATED BY USED
SECTORS 1806 (OR
VIDEO PART SIZE V_PART_SZ/
AUDIO PART SIZE A_PART_SZ)
DISPLAY TIME OF ONE STILL
PICTURE 1807 REPRESENTED
BY PLAYBACK TIME OF AUDIO
PART (IF VOBU CONTAINS
A_PCK) OR REPRESENTED BY
DISPLAY TIME OF VIDEO PART
(IF VOBU CONTAINS NO A_PCK)
ADDRESS OF 1ST V_PCK

ADDRESS OF 1ST V_PCK IN VOBU 1808 (OR S_VOG_SA)

SIZE OF I-PICTURE IN VOBU
(INDICATED BY TOTAL BYTES)
1809

PRESENTATION START TIME S_PTM OF STILL PICTURE (V_PCK/SP_PCK) 1810

1ST SYSTEM CLOCK REFERENCE F_SCR OF STILL. PICTURE (V_PCK/SP_PCK) 1811

ADDRESS OF 1ST A_PCK IN VOBU 1812

AUDIO S_PTM (PRESENTATION START TIME OF A_PCK) 1813

AUDIO E_PTM (PRESENTATION END TIME OF A_PCK) 1814

AUDIO F_SCR (SYSTEM CK REF. OF 1ST A_PCK IN VOBU) 1815

AUDIO L_SCR (SYSTEM CK REF. OF LAST A_PCK IN VOBU) 1816

PLAYBACK TIME OF AUDIO PART A_PB_TM

PONDING

VOB 1804

FIG. 13

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							٠.		
FIG. 14A	÷			0/	V0B #A 1821	21			
	V0BU 1825	1825	>	VOBU 1826	9		MOA	V0BU 1827	
FIG. 14B	STILL PICT. NO.	T. NO. 1	STILL	STILL PICT.	NO. 2		STILL F	STILL PICT. NO.	٦
	STLPCT	AUD 10	STLPCT	PCT	AUDIO	STLPCT	STLPCT		
•	1831	1841	1832	2	1842	1833	1834	1843	
F1G 14C	V_PCK	A_PCK	V_PCK	SP_PK	A_PCK	V_PCK	V_PCK	A_PCK	
5	3	2	1004		1002	5001	1024	1003	1
	CONTENTS	S	1ST STI IN CEL		•		LASI		PICT.
	SPECIFIED RY CFI	<u> </u>	V_PCK	Xd [™] dS	A_PCK	V_PCK	V_PCK		A_PCK
TIG. 14D			1852	1848	1865	1853	1854	1866	99
•				-[٨		
	•	A_PCK	V_PCK	A_PCK	V_PCK	V_PCK	A_PCK	V_PCK	
		1864	1855	1865	1856	1857	1866	1858	
		AUD 10	STLPCT	AUDIO	STLPCT	STLPCT	AUDIO	STLPCT	
F16.14E		1844	1835	1845	1836	1837	1846	1838	
			STILL PICTURE	CTURE		STILL	STILL PICTURE		
			NO. j			NO. h+j-2	1-2		•
F16.14F			V0BU 1828	1828		VOBU	V0BU 1829		
FIG. 146			•	9	VOB #B 1822	22		٠.	٠.

		
CONTENTS (S_CI) OF CELL PLAYBACK INFO. (CI) FOR PICTURE OBJECTS 1870	EXAMPLE 1871 WITH RESPECT TO FIG.14	EXAMPLE 1872 WITH RESPECT TO FIG.14
CELL ID (CI_SRP) 1873		
TYPE INFORMATION OF CELL (C_TY) 1880		
ID INFORMATION OF VOB WITH V_PCK 1874	VOB #A	1821
STILL PICT. NUMBER 1875 IN VOB INCLUDING V_PCK OF 1ST STILL PICTURE IN CELL (S_S_VOB_ENTN)	2	1826
STILL PICT. NUMBER 1876 IN VOB INCLUDING V_PCK OF LAST STILL PICTURE IN CELL (E_S_VOB_ENTN)	h	1827
ID INFORMATION OF VOB WITH A_PCK 1877	VOB #B	1822
STILL PICT. NUMBER 1878 IN VOB INCLUDING A_PCK OF 1ST STILL PICTURE IN CELL	j	1828
PRESENTATION TIME 1879 OF EACH STILL PICTURE HAVING NO CORRESPONDING A_PCK	2 SECONDS (ONE LINE)	

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CONTENTS OF CELL PLAYBACK INFO. (CI) FOR PTT
CELL ID (CI_SRP) 1883
TYPE INFO. OF CELL (C_TY) 1882
ID INFO. OF PTT WITH V_PCK 1884
STILL PICTURE NUMBER 1885 IN PTT OF VOB INCLUDING V_PCK OF 1ST STILL PICTURE IN CELL
STILL PICTURE NUMBER 1886 IN PTT OF VOB INCLUDING V_PCK OF LAST STILL PICTURE IN CELL
ID INFO. OF PTT WITH A_PCK 1887
STILL PICTURE NUMBER 1888 IN PTT OF VOB INCLUDING A_PCK OF 1ST STILL PICTURE IN CELL
PRESENTATION TIME 1889 OF EACH STILL PICT. HAVING NO CORRESPONDING A_PCK

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STILL PICTURE AV FILE INFO. (S_AVFI) FOR PTT (CHAPTER)

PTT INFO. FOR PICT. OBJECTS MANAGEMENT INFO. 1891

SEARCH POINTER
OF PIT INFO. FOR
PICT. OBJECTS
#1 1892

SEARCH POINTER
OF PIT INFO. FOR
PICT. OBJECTS
#2 1893

PTT INFO. FOR PICT. OBJECTS #1 1895

PTT INFO. FOR PICT. OBJECTS #2 1896

PTT GENERAL INFORMATION FOR PICTURE OBJECTS 1898

VOB MAP FOR PICTURE OBJECTS 1899

FIG. 17

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VOB MAP FOR PICT. OBJECTS 1899

NUMBER OF STILL PICT. (OR NUMBER OF VOBs) IN CORRESPONDING PTT 1901 (OR S_VOB_Ns)

INFO. OF 1ST STILL PICT. IN CORRESPONDING PTT 1902

INFO. OF 2ND STILL PICT. IN CORRESPONDING PTT 1903 DATA SIZE OF STILL PICTURE (OR VOB) INDICATED BY USED SECTORS 1906

DISPLAY TIME OF ONE STILL
PICTURE 1907 REPRESENTED
BY PLAYBACK TIME OF AUDIO
PART (IF VOB CONTAINS
A_PCK) OR REPRESENTED BY
DISPLAY TIME OF VIDEO PART
(IF VOB CONTAINS NO A_PCK)

ADDRESS OF 1ST V_PCK IN VOB 1908 (OR S_VOG_SA)

SIZE OF I-PICTURE IN VOB (INDICATED BY TOTAL BYTES) 1909

PRESENTATION START TIME S_PTM OF STILL PICTURE (V_PCK/SP_PCK) 1910

1ST SYSTEM CLOCK REFERENCE F_SCR OF STILL. PICTURE (V_PCK/SP_PCK) 1911

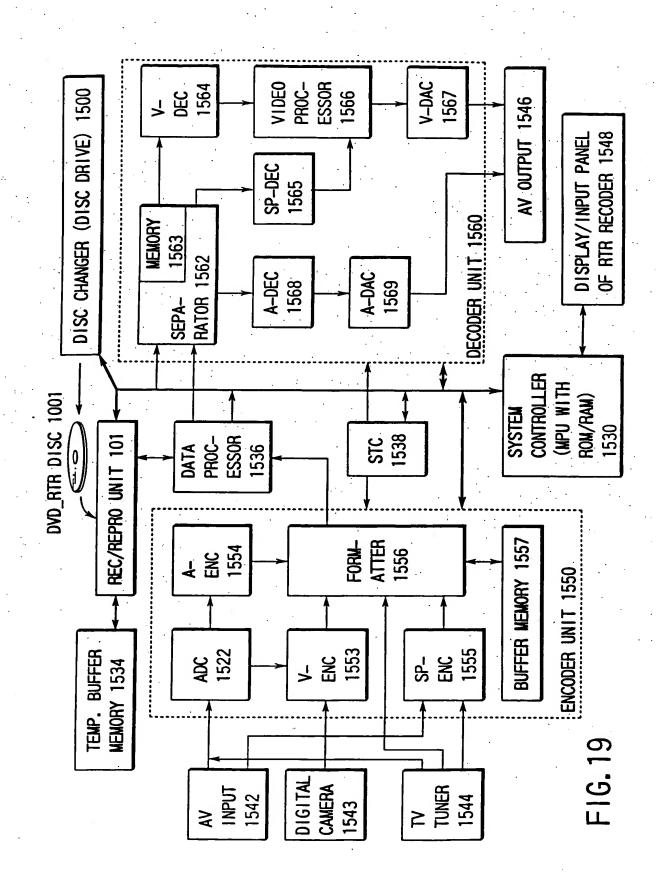
ADDRESS OF 1ST A_PCK IN VOB 1912

AUDIO S_PTM (PRESENTATION START TIME OF A_PCK) 1913

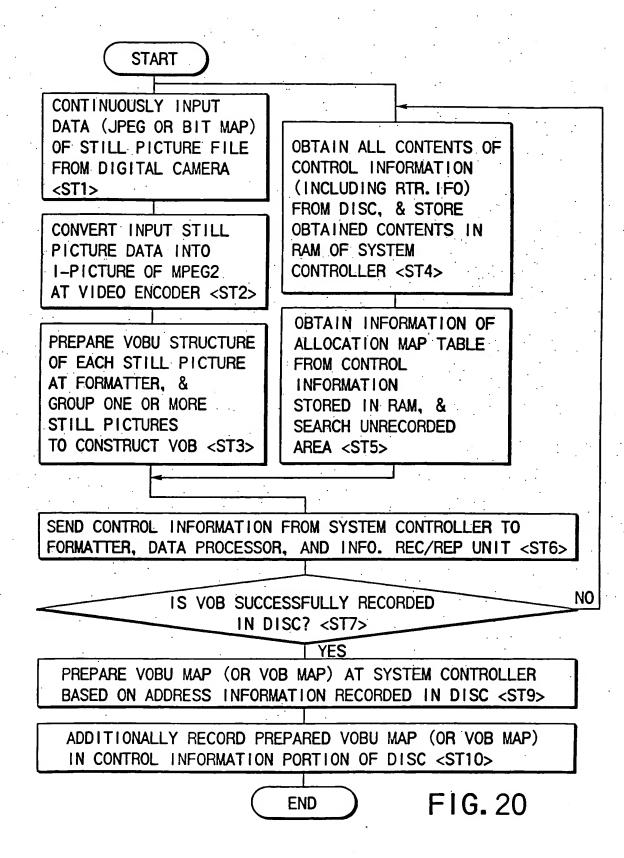
AUDIO E_PTM (PRESENTATION END TIME OF A_PCK) 1914

AUDIO F_SCR (SYSTEM CK REF. OF 1ST A_PCK IN VOB) 1915

AUDIO L_SCR (SYSTEM CK REF. OF LAST A_PCK IN VOB) 1916



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START

OBTAIN ALL CONTENTS OF CONTROL INFORMATION (RTR. 1FO) FROM DISC. & STORE OBTAINED CONTENTS IN RAM OF SYSTEM CONTROLLER <ST11>

OBTAIN PLAYBACK CONTROL INFO. FROM CONTROL INFO. STORED IN RAM, & INTERPRETE OBTAINED INFORMATION AS TO MANNER OF REPRODUCTION <ST12>

SEARCH PROGRAM TO BE REPRODUCED BASED ON PGC CONTROL INFO. IN RAM, OBTAIN CELL(S) IN PGC INFORMATION OF SEARCHED PROGRAM, & OBTAIN VOB_ID OR PTT_ID SPECIFIED BY CORRESPONDING CELL FROM CELL PLAYBACK INFORMATION STORED IN RAM <ST13>

OBTAIN DISC ADDRESS OF VOB TO BE REPRODUCED BASED ON VOB INFORMATION OR PTT INFORMATION STORD IN RAM <ST14>

ACCESS VOB RECORDED IN DISC BASED ON CONTROL SIGNAL FROM SYSTEM CONTROLLER TO REPRODUCE INFORMATION OF VOB, & PROVIDE REPRODUCED INFORMATION AS AV OUTPUT FOR DISPLAY <ST18>

RECEIVE ADDITIONAL INFO. INPUT BY USER WHILE DISPLAYING AV OUTPUT, & GROUP ONE OR MORE STILL PICTURES AT FORMATTER BASED ON USER-INPUT INFORMATION TO PREPARE VOB OR PTT <ST19>

RECORD INFORMATION OF VOB PREPARED BY FORMATTER <ST20>

END

FIG. 21

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START

OBTAIN ALL CONTENTS OF CONTROL INFORMATION (RTR. 1FO) FROM DISC. & STORE OBTAINED CONTENTS IN RAM OF SYSTEM CONTROLLER <ST11>

OBTAIN PLAYBACK CONTROL INFO. FROM CONTROL INFO. STORED IN RAM, & INTERPRETE OBTAINED INFORMATION AS TO MANNER OF REPRODUCTION <ST12>

SEARCH PROGRAM TO BE REPRODUCED BASED ON PGC CONTROL INFO. IN RAM, OBTAIN CELL(S) IN PGC INFORMATION OF SEARCHED PROGRAM, & OBTAIN VOB_ID OR PTT_ID SPECIFIED BY CORRESPONDING CELL FROM CELL PLAYBACK INFORMATION STORED IN RAM <ST13>

OBTAIN DISC ADDRESS OF VOB TO BE REPRODUCED BASED ON VOB INFORMATION OR PTT INFORMATION STORD IN RAM <ST14>

ACCESS VOB RECORDED IN DISC BASED ON CONTROL SIGNAL FROM SYSTEM CONTROLLER TO REPRODUCE INFORMATION OF VOB, & PROVIDE REPRODUCED INFORMATION AS AV OUTPUT FOR DISPLAY <ST18>

ACCESS VOB #A RECORDED IN DISC TO PROVIDE STILL PICTURE INFORMATION OF VOB #A <ST16>

ACCESS VOB #B IN DISC TO REPRODUCE AUDIO INFORMATION OF VOB #B, & PROVIDE AUDIO INFO. OF VOB #B AND STILL PICTURE INFO. OF VOB #A AS AV OUTPUT FOR STILL PICTURE DISPLAY WITH SOUND <ST17>

END

FIG. 22

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USER DEFINED PGC INFO. TABLE INFORMATION (UD_PGCITI) RTR_VMG USER DEFINED PGCI SEARCH RTR VIDEO MANAGER POINTER #1 (UD_PGCI_SRP#1) INFO. (RTR_VMGI) MOVIE AV FILE INFO. USER DEFINED PGCI SEARCH TABLE (M_AVFIT) POINTER #n (UD_PGCI SRP#n) STILL PICTURE AV USER DEFINED PGC INFO. #1 FILE INFO. TABLE (UD_PGCI#1) (S_AVFIT) ORIGINAL PGC INFORMATION USER DEFINED PGC INFO. #n (ORG_PGCI) (UD_PGCI#n) USER DEFINED PGC CONTENTS OF PGCI (ORIGINAL INFORMATION TABLE PGCI OR USER DEFINED PGCI) (UD_PGCIT) PGC INFORMATION #i (PGCI#i) TEXT DATA MANAGER PGC GENERAL INFO. (PGC GI) (TXTDT_MG) PROGRAM INFO. #1 (PGI#1) MANUFACTURER'S INFO. TABLE (MNFIT) PROGRAM INFO. #m (PGI#m) CELL INFO. SEARCH POINTER #1 START ADDRESS OF CELL INFO. (CI_SA) (CI_SRP#1) CELL INFO. SEARCH POINTER #n MOVIE CELL INFO. (CI_SRP#n) (M,CI)CELL INFO. #1 (CI#1) OR STILL PICTURE CELL INFO. #n (CI#n) CELL INFO. (S_CI)

FIG. 23

STILL PICTURE CELL INFO. (S_CI)

STILL PICTURE CELL GENERAL INFORMATION (S_C_GI)

STILL PICT. CELL ENTRY POINT INFORMATION #1 (S_C_EPI#1)

STILL PICT. CELL ENTRY POINT INFORMATION #n (S_C_EPI#n)

FIG. 24

CONTENTS OF S_C_GI

FIELD NAME	CONTENTS
RESERVED	RESERVED
C_TY	CELL TYPE
S_V0G1_SRPN	S_VOGI SEARCH POINTER NUMBER
C_EPI_Ns	NUMBER OF CELL ENTRY POINT INFO.
S_S_VOB_ENTN	START S_VOB_ENT NUMBER
E_S_VOB_ENTN	END S_VOB_ENT NUMBER

FIG. 25

CONTENTS OF S_C_EPI

FIELD NAME	CONTENTS
EP_TY	ENTRY POINT TYPE
S_VOB_ENTN	S_VOB_ENT NUMBER
PRM_TXT1	PRIMARY TEXT INFORMATION

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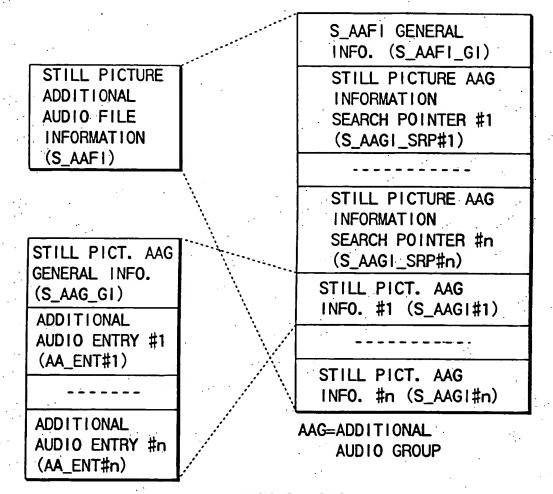


FIG. 27

CONTENTS OF S_AAG_GI

FIELD NAME	CONTENTS
AA_ENT_Ns	NUMBER OF AA_ENT
S_AA_STIN	STILL PICTURE ADDITIONAL AUDIO STREAM INFORMATION NUMBER
S_AAG_SA	START ADDRESS OF THIS AAG IN STILL PICTURE ADDITIONAL AUDIO FILE

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CONTENTS OF AA_ENT

FIELD NAME	CONTENTS
AA_TY	ADDITIONAL AUDIO TYPE
AA_SZ	SIZE OF ADDITIONAL AUDIO STREAM
AA_PB_TM	PLAYBACK TIME OF ADDITIONAL AUDIO STREAM (MEASURED BY VIDEO FIELDS)

FIG. 29

CONTENTS OF S_VOG_GI

FIELD NAME	CONTENTS
S_V0B_Ns	NUMBER OF S_VOBs
S_VOB_STIN	STILL PICTURE VOB STREAM INFORMATION NUMBER
FIRST_VOB_REC_TM	TIME WHEN THE FIRST VOB IN THIS VOB GROUP WAS RECORDED
LAST_VOB_REC_TM	TIME WHEN THE LAST VOB IN THIS VOB GROUP WAS RECORDED
S_VOG_SA	START ADDRESS OF THIS VOB GROUP IN STILL PICTURE AV FILE

FIG. 30

CONTENTS OF S_VOB_ENT (TYPE 1)

FIELD NAME	CONTENTS
S_V0B_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART

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CONTENTS OF S_VOB_ENT (TYPE 2)

FIELD NAME	CONTENTS
S_VOB_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART
A_PART_SZ	SIZE OF ORIGINAL AUDIO PART
A_PB_TM	PLAYBACK TIME OF AUDIO PART (DESCRIBED IN VIDEO FIELDS)

FIG. 32

CONTENTS OF S_VOB_ENT (TYPE 3)

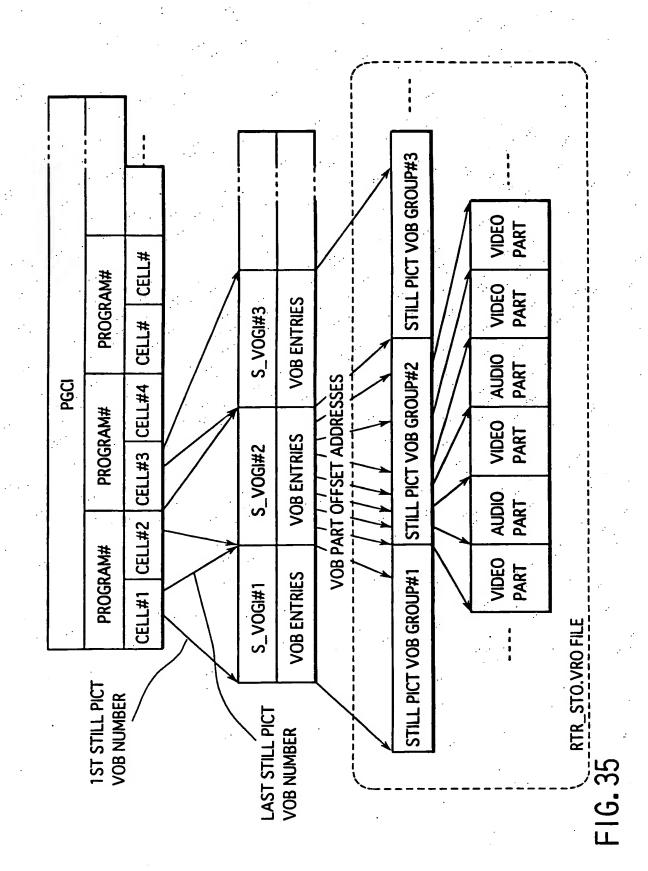
FIELD NAME	CONTENTS
S_VOB_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART
S_AAGN	ADDITIONAL AUDIO GROUP NUMBER
AA_ENTN	AA_ENT NUMBER

FIG. 33

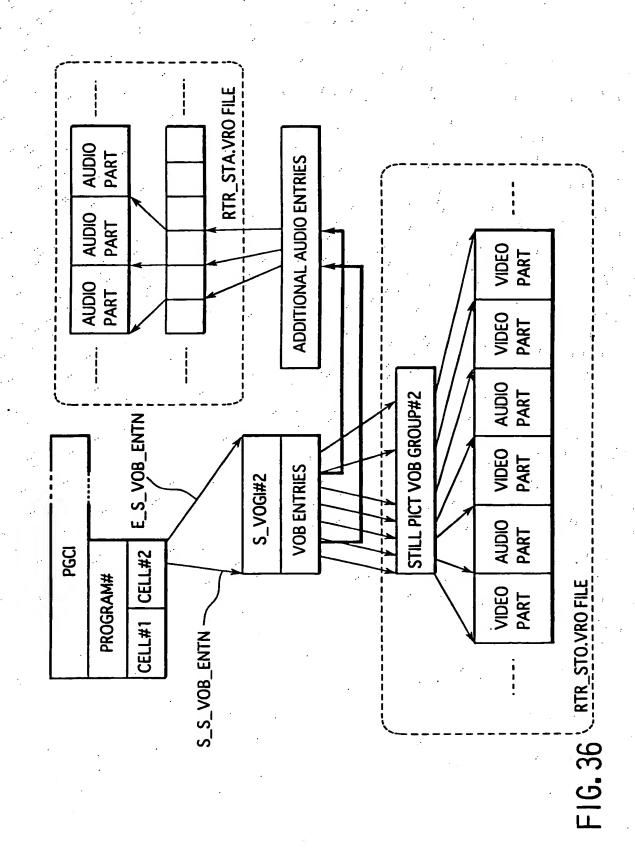
CONTENTS OF S_VOB_ENT (TYPE 4)

FIELD NAME	CONTENTS
S_VOB_ENT_TY	STILL PICTURE VOB ENTRY TYPE
V_PART_SZ	SIZE OF VIDEO PART
A_PART_SZ	SIZE OF ORIGINAL AUDIO PART
A_PB_TM	PLAYBACK TIME OF AUDIO PART
S_AAGN	ADDITIONAL AUDIO GROUP NUMBER
AA_ENTN	AA_ENT NUMBER

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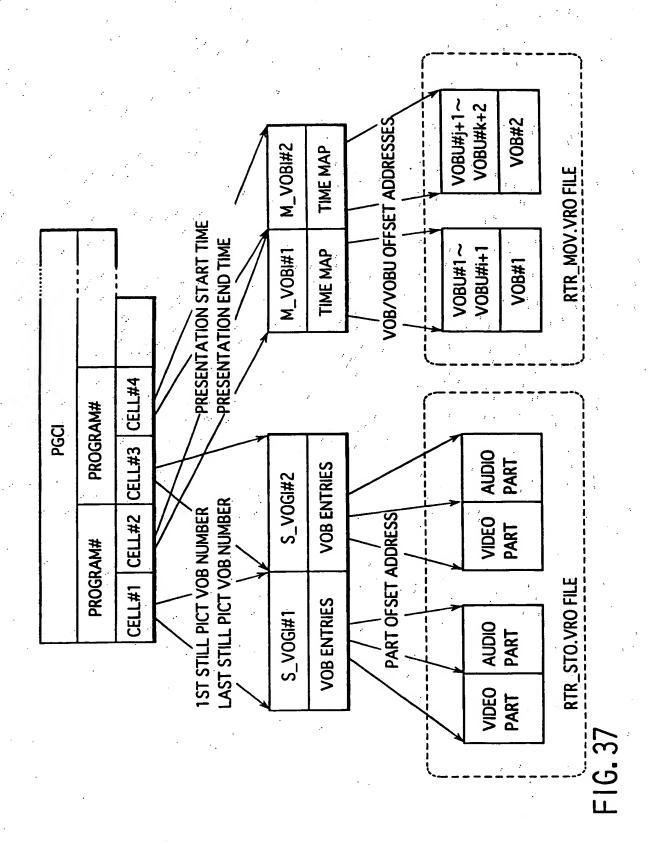
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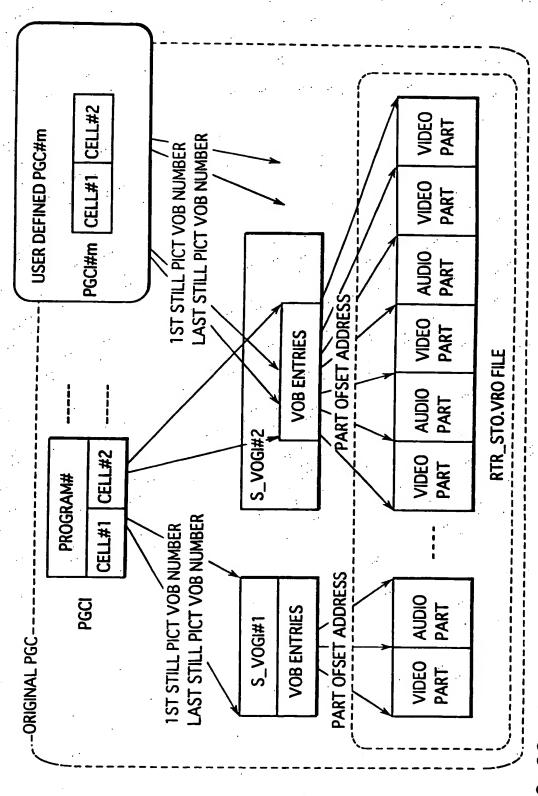
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